

REMARKS

The present Amendment amends claims 1, 4, 9-11, cancels claim 14, leaves claims 2, 3, 5-8, 12 and 13 unchanged and adds new claim 15. Therefore, the present application has pending claims 1-13 and 15.

The drawings stand objected to due to informalities noted by the Examiner in paragraphs 2 and 3 of the Office Action. Filed on even date herewith are Proposed Drawing Corrections to correct the informalities noted by the Examiner in paragraphs 2 and 3 of the Office Action. Particularly, corrections were made to Figs. 1 and 3 so as to correct misspelled terms and to add an element corresponding to the pilot signal and corrections were made to Figs. 5 and 6 to add the legend "Prior Art". Therefore, this objection to the drawings have been overcome and should be withdrawn.

The claims stand objected to due to informalities noted by the Examiner in paragraph 4 of the Office Action. Amendments were made to the claims to correct the informalities noted by the Examiner. Therefore, this objection is overcome and should be withdrawn.

Claim 14 stands rejected under 35 USC §112, first paragraph as being a single means claim with undue breadth. As indicated above, claim 14 was canceled. Therefore, this rejection is rendered moot. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claims 1-14 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. As indicated above, claim 14 was

canceled. Therefore, this rejection with respect to claim 14 is rendered moot. With respect to the remaining claims 1-13 Applicants submit that the description of the invention is definite and does in fact particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Accordingly, reconsideration and withdrawal of this rejection with respect to the remaining claims 1-13 is respectfully requested.

With respect to the rejection of the remaining claims 1-13 under 35 USC §112, second paragraph, the Examiner alleges in paragraph 9 thereof that:

“it is unclear whether the signal points of the pilot signal and the auxiliary signal differ only from each other or also from the signal points from the information codes”.

Applicants submit that the language used in the claims clearly provide a description where the signal points for the pilot signal and the auxiliary signal differ from each other and also differ from the signal points for the information codes.

The present invention as recited in the claims is directed to a digital modulation type signal processing apparatus in which the signal points for the pilot signal and the auxiliary signal differ from each other as shown in Fig. 1 with the aim to make it easy to distinguish the signal points for the pilot and auxiliary signals to facilitate analysis of the causes of a failure in the transmission apparatus and for making adjustments to avoid such failure. The present invention as recited in the claims and as disclosed in the specification is intended to overcome the disadvantages of the prior art where signal points for the pilot and auxiliary signals do not differ from each other such as that illustrated in Fig. 6 of the present application.

Therefore, according to the present invention the signal points for the pilot signal and the auxiliary signal differ from each other and also differ from the signal points from the information codes. However, such difference is not essential in the present invention.

According to the present invention, the auxiliary signal may include a Transmission and Multiplexing Configuration Control signal (TMCC) and auxiliary channel (AC) signal. The Examiner's attention is directed to page 7, lines 21-28 of the present application. According to the present invention, if the AC signal as the auxiliary signal is modulated with BPSK or DBPSK schemes, then the signal points for the pilot signal and the auxiliary signal differ from each other and also differ from the signal points for the information codes. However, if the AC signal as the auxiliary signal is modulated with a different modulation scheme such as OPSK or 16QAM schemes, other than the BPSK or DBPSK schemes, then the signal points for the auxiliary signal overlap with the signal points for the information codes. Thus, the claims clearly recite and are directed to the features of the present invention wherein the signal points for the pilot signal and the auxiliary signal differ from each other and also differ from the signal points for the information codes.

Thus, Applicants submit that the claims as written adequately apprise those of ordinary skill in the art of the meets and bounds of the invention and as such particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Therefore, reconsideration and withdrawal of the 35 USC §112, second paragraph rejection of claims 1-13 is respectfully requested.

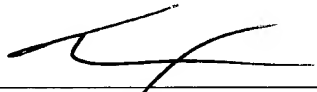
As indicated above, the present Amendment adds new claim 15. New claim 15 was drafted according to the above so as to clearly and distinctly claim the subject matter which Applicants regard as their invention. Accordingly, new claim 15 complies with the requirements of 35 USC §112.

In view of the foregoing amendments and remarks, applicants submit that claims 1-13 and 15 are in condition for allowance. Accordingly, early allowance of claims 1-13 and 15 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (500.40274X00).

Respectfully submitted,

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